

Serial No. 10/661,254

## IN THE SPECIFICATION:

Please delete the paragraph bridging pages 9-10, and substitute the following:

--Referring to Fig. 4, an automated synthesis machine is shown for synthesizing a chemical having four different possible compounds or cells or molecules (e.g., GCAT for a DNA synthesis), where a main bin 830 receives or pools all the beads 8 and provides the beads 8 to a sorting machine 832, which performs the sorting step 806 in the loop 814. In addition the machine 832 deposits the beads in the proper bins 834, 836, 838, 840, having the bases G, C, A, T, respectively. Any other four chemicals can be used if desired. Once the specific base has been attached to a bead it is dropped or placed in a device 842 which transports the beads back into the main bin 830 for resorting by the machine 832. When synthesis has been completed on a given bead the machine deposits the completed bead in a done bin 844.--.